Traces

A trace file is a log file that records activity from the Cisco VVB components. Trace files let you obtain specific, detailed information about the system that can help you troubleshoot problems.

The Cisco VVB system can generate trace information for different services. This information is stored in a trace file. To help you control the size of a trace file, you can specify the services for which you want to collect information and the level of information that you want to collect.

The Cisco VVB system also generates information about all threads that are running on the system. This information is stored in the thread dump file and is useful for troubleshooting.

Component Trace Files

The component trace file contains information about each component. You can create a trace file for any of the following Cisco VVB components:

- Administration
- Engine
- Speech Server

The component trace file contains information about each component. To set up the trace file, follow the procedure mentioned in **Configure Trace Parameters** section.

After configuring the information that you want to include in the trace files for the various services, you can collect and view trace files by using the trace and log central option in the Cisco Unified Real-Time Monitoring Tool.

Configure Trace Parameters

To update trace file information and to activate and deactivate logging, follow the procedure mentioned below:

Procedure

Step 1 From the Cisco VVB Serviceability menu bar, choose **Trace** > **Configuration**.

The Trace Configuration web page opens displaying the default trace configuration for Cisco VVB Engine.

Step 2 From the **Select Service** drop-down list box, choose a service or component for which you want to configure trace. Then, click **Go**.

You should be able to view the existing Trace configurations and debug levels for the selected Cisco VVB service with check boxes for the various Debugging and XDebugging levels for each sub facility.

The debug levels for different Cisco VVB subfacilities or services might vary depending on the selected service and are listed in the following table:

Table 1: Debug Levels for Different Cisco VVB Subfacilities

Cisco VVB Components	Subfacilities or Services
Cisco VVB Administration	Libraries Managers Miscellaneous
Cisco VVB Engine	Libraries Managers Miscellaneous Steps Subsystems
Cisco VVB Speech Server	Subsystems

Step 3 Update the debug level for one or more of the libraries or sub facilities for the selected service by doing the following:

a) To activate traces for a specific component or logging for a server, check the check box for the service that you chose.

b) To deactivate logging for a server, uncheck the specific check box.

Step 4 To limit the number and size of the trace files, you can specify the trace output setting using the following two fields. See the following table for description and default values for these two fields.

Field	Description
Maximum No. of Files	The maximum number of trace files to be retained by the system. This field specifies the total number of trace files for a given service. Cisco VVB Serviceability automatically appends a sequence number to the file name to indicate which file it is; for example, Cisco001MADM14.log. When the last file in the sequence is full, the trace data begins writing over the first file. The default value varies by service.

Field	Description
Maximum File Size	This field specifies the maximum size of the trace file in kilobytes or megabytes depending on the selected service. The default value varies by service.

Step 5 Click **Save** icon in the tool bar in the upper, left corner of the window or the **Save** button at the bottom of the window to save your trace parameter configuration. The settings are updated in the system and the trace files will be generated as per the saved settings. Click **Restore Defaults** icon to revert to the default settings for the selected service.

Caution You should activate additional logging only for the purpose of debugging and remember to deactivate logging once the debugging session is complete.

Related Topics

Trace file location, on page 5

Trace Level Options

A trace file is a log file that records activity from the Cisco VVB component subsystems and steps. Trace files let you obtain specific, detailed information about the system that can help you troubleshoot problems.

The Cisco VVB system can generate trace information for every component. This information is stored in an trace file. To help you control the size of an trace file, you specify the components for which you want to collect information and the level of information that you want to collect.

A trace file that records all information for a component, such as Engine, can become large and difficult to read. To help you manage the trace file, the Cisco VVB system lets you specify the subfacilities for which you want to record information.

For each component, you can select one or more Debugging trace levels. These selections specify the level of details in the debugging messages that the system sends to a trace file. For instance, if you select Debugging, the system sends only the basic error messages while if you select XDebugging5, the system will send errors, warnings, informational, debugging, verbose messages and so on in detail to the trace file.

The table below describes the Trace file subfacilities.

Table 2: Trace File Subfacilities

Component Code	Description
APP_MGR	Applications Manager
ARCHIVE_MGR	Archive Manager
BOOTSTRAP_MGR	Cisco VVB Bootstrap Manager
CFG_MGR	Configuration Manager
CHANNEL_MGR	Channel Manager
CLUSTER_MGR	Cluster Manager
CONTACT_MGR	Contact Manager

Component Code	Description
DOC_MGR	Document Manager
ENG	Engine
EXECUTOR_MGR	Executor Manager
GENERIC	Generic catalog for a facility
JASMIN	Java Signaling and Monitoring Interface
LIB_CFG	Configuration Library
LIB_EVENT	Event Message Library
LIB_JDBC	JDBC Library
LIB_JINI	JINI Services
LIB_LICENSE	License Library
LIB_MEDIA	Media Library
LIB_RMI	Java Remote Method Invocation Library
LIB_SERVLET	Servlet Library
LIB_TC	Tomcat Library
LOG_MGR	Log Manager
MGR_MGR	Manager Manager
NODE_MGR	Node Manager
PROMPT_MGR	Prompt Manager
RTPPORT_MGR	RTP Manager
SCRIPT_MGR	Script Manager
SESSION_MGR	Session Manager
SIP_STACK	SIP Stack logging
SOCKET_MGR	Socket Manager
SS_CMT	Cisco Media Termination Subsystem
SS_DB	Database Subsystem
SS_HTTP	HTTP Subsystem
SS_MRCP_ASR	MRCP ASR Subsystem
SS_MRCP_TTS	MRCP TTS Subsystem
SS_RM	Resource Manager Subsystem
SS_RMCM	Resource Manager Contact Manager Subsystem
SS_ROUTEANDQUEUE	Route and Queue Subsystem
SS_RTR	Real-Time Reporting Subsystem

Component Code	Description
SS_SIP	SIP Subsystem
SS_VB	Voice Browser Subsystem
STEP_CALL_CONTROL	Call Control Steps
STEP_MEDIA_CONTROL	Media Control Steps
STEP_SESSION_MGMT	Session Management Steps
STEP_CALL_CONTACT	Call Contact Steps
STEPS_CONTACT	Contact Steps
STEPS_DB	Database Steps
STEPS_DOCUMENT	Document Steps
STEPS_GRAMMAR	Grammar Steps
STEPS_ICM	Cisco Unified ICME Steps
STEPS_JAVA	Java Steps
STEPS_PROMPT	Prompt Steps
STEPS_SESSION	Session Steps
STEPS_USER	User Steps

Trace file location

You can collect and view trace information using the Real-Time Monitoring Tool (RTMT).

Trace File Information

The trace files contain information in standard Syslog format. The file includes some or all of the following information for each event that it records:

- Line number
- Date and time the event occurred
- Facility and subfacility (component) name
- Severity level
- Message name
- Explanation
- Parameters and values

Log Profiles Management

Log Profile is an aggregated entity that preserves trace settings of the following Cisco VVB services:

- Cisco VVB Engine (Traces termed as MIVR)
- Cisco VVB Administration (Traces termed as MADM)

Choose **Trace** > **Profile** from the Cisco VVB Serviceability menu bar to access the Log Profiles Management web page. The Log Profiles Management web page opens displaying the available log profiles each with a radio button. You can perform different operations on the listed log profiles, which are explained in detail in the following sub-sections.

Log profiles in Cisco VVB can be one of the following two types:

1. System Log Profiles: These log profiles are pre-installed with Cisco VVB and you cannot modify these profiles.

   The following table provides information on the log profiles that are factory shipped with Cisco VVB:

   Table 3: System Log Profiles

Name	Scenario in which this profile must be activated
DefaultVVB	Generic logs are enabled.
AppAdminVVB	For issues with web administration through AppAdmin, Cisco VVB Serviceability, and other web pages.
MediaVVB	For issues with media setup or media transmission.
VoiceBrowserVVB	For issues with handling calls.
MRCPVVB	For issues with ASR/TTS with Cisco VVB interaction.
CallControlVVB	For issues with SIP signaling related are published in the log.

Enable Profile

To enable or activate a log profile, perform the following steps:

Procedure

Step 1 From the Cisco VVB Serviceability menu bar, choose **Trace** > **Profile**. The Log Profiles Management web page displays.

You can enable a log profile using any one of the following methods from the Log Profiles Management web page:

a) Select the radio button for the profile and click **Enable** icon or button
b) Click the hyperlink for the desired profile. Log Profile Configuration web page for the selected profile is displayed. Click **Enable** icon or button in the Profile Configuration web page

c) Click **Add New**. Enter the desired trace settings in the Profile Configuration web page and click **Save and Enable** icon or button in the Profile Configuration web page.

Step 2 The trace setting for the selected profile is transferred to system's trace settings and on successful activation, a message will be displayed in the status bar.